



Office of the City Auditor

Software Licensing Appropriation Process Report No. 0521

July 15, 2005

Controls are sufficient to ensure that the Enterprise Software Maintenance Agreement used by Information Systems will be budgeted for and properly distributed to the actual users of the software. Budget adjustments may be needed to ensure financial compliance with the Agreement once final unit cost is established.

CITY COUNCIL

Mayor
Mary Manross

Council
Betty Drake
Wayne Ecton
W.J. "Jim" Lane
Robert Littlefield
Ron McCullagh
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July 15, 2005

To the Most Honorable Mary Manross, Mayor
and Members of the Scottsdale City Council

Transmitted herewith is Audit Report No. 0521, "Software Licensing Appropriation Process." Staff in Information Systems and Financial Services were extremely cooperative while completing this audit and we would like to extend our thanks for the assistance provided.

If you need additional information or have any questions, please contact me at 480-312-7756.

Respectfully submitted,

Cheryl Barcala, CPA, CIA, CFE, CGFM, CISA, CISSP
City Auditor

Table of Contents

EXECUTIVE SUMMARY	1
BACKGROUND	1
OBJECTIVE, SCOPE, AND METHODOLOGY	3
OBJECTIVE 1: Determine if sufficient controls have been implemented to ensure that the City adequately budgets for the Enterprise Software Agreement expenses.....	4
OBJECTIVE 2: Determine if controls are sufficient to ensure the City does not purchase bundled software when buying new computers.	5
APPENDIX A - MANAGEMENT RESPONSE	6

EXECUTIVE SUMMARY

An audit of the process used to budget for software maintenance and licensing was included on the 2005 Audit Plan for our Office. This report outlines the results of work completed to assess controls in place to develop the budget amount needed for maintenance and new licenses.

We determined that controls are sufficient to reasonably approximate the amount needed for software maintenance and licenses. However, the process hinges on projections of future fees provided by the authorized reseller. As such, if there is a significant change between the time the estimate is provided and when the actual fee is set, there is a potential that the amount incorporated in the budget will need to be adjusted when the payment is due.

This report does not include any recommendations so there is no Action Plan. Management's formal response can be found in Appendix A of this Report.

BACKGROUND

It is the policy of the City of Scottsdale that only software that meets manufacturer requirements and software copyright laws can be installed on City owned computers. To simplify tracking and provide access to the most recent versions of the Microsoft products set as the City standard platform, the City uses an enterprise arrangement that is available to businesses needing more than 250 licenses. In addition to these benefits, the Enterprise Agreement (Agreement) provides a volume purchase price point based on the number of licenses needed, eliminates the need to purchase software bundled with new computers, and avoids the swings in costs that occur when upgrades are purchased at the time of release.

To enter into the Agreement, the City used an existing arrangement negotiated by the State of Arizona. The designated license agent is ASAP Software Express, Inc. As the reseller, ASAP agrees to provide the licenses for a fixed percent mark up over the price established by Microsoft. Contractual terms require ASAP to maintain information and provide reports on the number of licenses sold.

The cost to acquire the software licenses necessary to operate a new computer is approximately \$800. This covers the operating system, desktop software (Word, Excel, Access, PowerPoint), and the Core Client Access License. Maintenance cost per license is approximately \$170 per year

thereafter. This fee gives the City access to the most recent versions of software without paying the customary upgrade charge.

To participate in the Agreement, the City calculates the number of computers operating on the Windows platform and then pays the maintenance fee for each computer. This process is very important because the City must “true up” the number of licenses at the end of the year. If an error is made in the count at the beginning of the year, it will impact the amount owed the following year when this calculation is made. For new computers, the City tracks the purchases and then submits the amount due for the new licenses as part of next year’s payment.

To budget sufficient funds to make the annual payment, the Information Systems Department Advisor contacts ASAP and obtains a quote for the fees that will be in place next year. A copy of the ISIS inventory database is loaded into Excel and sorted by cost center to determine the number of computers assigned to each work area. From that count, adjustments are made for computers that do not use the enterprise software as well as units that will not require a license due to obsolescence. The count per cost center multiplied by the projected unit cost then becomes the amount incorporated into the citywide budget projections for software maintenance. For new licenses, the projected cost is incorporated into the estimated cost of a new computer. The Budget Division of the Financial Services Department then incorporates the estimate into the cost of a new position to ensure that the budget has sufficient funds to purchase the equipment needed. If a work area needs a new computer but funds were not budgeted, it will fall to the area to look for offsets that can be used to pay for the computer and licenses.

In July, at the start of the new fiscal year, the amount incorporated into each cost center’s budget for software maintenance and licensing is “swept” and transferred to a clearing account to be held until the payment for the licenses is processed. To record the liability for the new licenses that will be paid the following year when the “true up” is done, Information Systems staff logs the purchase of each new computer and processes a journal entry to transfer the fee from the appropriate cost center to a liability account.¹

¹ In prior years, a clearing account was used. The use of a liability account started with FY 04/05 so that the money would be available in the next fiscal period when payment is due.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objectives of this audit were to determine if sufficient controls have been implemented to ensure the City reasonably projects the cost of software maintenance and licenses as part of the budget and avoids buying software that has already been covered under the Agreement. The scope of the work was limited to Information Systems departmental policies and practices regarding the budget and payment process relating to software maintenance and licensing for the City's network.

To complete the work, we interviewed the Chief Information Officer, the Information Systems Departmental Advisor, and staff in the Financial Services Department to gain an understanding of procedures for developing the budget and accounts used to pay for software maintenance and licenses. We reviewed Scottsdale Revised Code, applicable Administrative Regulations, Accounting guidelines, files and documentation maintained by Information Systems staff, the 2004/2005 Adopted Budget, the 2005/2006 Proposed Budget, and expenditure reports from the Financial Services Department. We tested cost centers to verify that the number of computers included in the projection agreed to inventory records; we reviewed purchase records to test the recording of the liability for new licenses; and we tested purchases to ensure that software was not included as part of the cost of new hardware. Finally, we performed analytical tests to check the amount included in the FY 05/06 Proposed Budget.

During the audit, we discussed two recommendations with management that are not considered material but would improve the process:

1. Work towards an agreement with the vendor on a timeline in which the fees for the upcoming year will be set and available for use in budgeting.
2. Re-evaluate the amount included in the budget prior to the final adoption to ensure that any significant change in the estimate and final fee will not impact the amount needed in the next fiscal year.

We also discussed one finding with management not included in this report because the issue was resolved during the audit. When conducting work, we found that the wrong account was used when the liability for future licenses was recorded. Staff corrected the process when brought to their attention.

Audit work was conducted in accordance with generally accepted government audit standards as they relate to expanded scope auditing in a local government environment and as required by Article III, Scottsdale Revised Code, Section 2-117, *et seq.* Survey work began in March 2005 and audit testing was completed in April 2005 with Sonny Phillips conducting the work.

OBJECTIVE 1: DETERMINE IF SUFFICIENT CONTROLS HAVE BEEN IMPLEMENTED TO ENSURE THAT THE CITY ADEQUATELY BUDGETS FOR THE ENTERPRISE SOFTWARE AGREEMENT EXPENSES.

Finding: Sufficient controls have been implemented to provide reasonable assurance that the City will budget an appropriate amount for software licensing and maintenance.

Criteria: The amount included in each cost center budget for software maintenance and licenses should accurately reflect the number of computers assigned to that work unit and the amount set aside, in total, as part of the citywide budget calculated with a methodology that reasonably projects the amount needed the next year.

A process should be in place to project the number of new computers that will be added to the inventory and reflect the liability associated with the future payment for the licenses. Cost centers purchasing new PCs throughout the year must be charged for the cost of a new enterprise software license using the proper account. Additionally, those funds need to be carried over to the next fiscal year for payment of the Agreement invoice.

Condition: Procedures have been established to budget for software maintenance and new licenses. Testing indicated that the procedures are being followed. We tested:

- Fifty-two cost centers and all 12 departments and found no exception between the number of licenses budgeted and the number of licenses in use per Information Systems records.
- A sample of journal entries for transferring the liability associated with new licenses and compared the number of new purchases between July 2004 and December 2004 to the amount recorded to the amount in the liability account. We found no exceptions.

We also performed an analytical analysis of the amount currently set aside by using the final count from the 2004 billing calculation and determined the number of new subscriptions that would be required. With this calculation, we estimated that approximately \$539,000 would be needed. The amount included in the FY 05/06 budget is slightly over \$488,000. With the current balance in the software liability account, the difference is less than \$15,000.

Cause: The Departmental Advisor has implemented sufficient procedures to be able to project, with reasonable certainty, the number of maintenance licenses. Additionally, the Departmental Advisor developed a process to track new computers and record the obligation for the subscription.

Effect: The amount incorporated into the budget is a reasonable estimate of the amount of funds that will be needed in the next fiscal year for software maintenance and licenses. Slight overages/shortages may occur as a result of timing and changes in the prices quoted by the vendor as price projections.

Recommendations: None.

OBJECTIVE 2: DETERMINE IF CONTROLS ARE SUFFICIENT TO ENSURE THE CITY DOES NOT PURCHASE BUNDLED SOFTWARE WHEN BUYING NEW COMPUTERS.

Finding: Controls are sufficient to ensure the City does not buy bundled software when buying new computers.
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Criteria: Procedures should be in place to ensure that purchase agreements clearly outline that software is to not be included as a cost of computers.

Condition: We found that bundled software is not included when the City buys new computers. Only enterprise software needed for servers is purchased as part of an acquisition of hardware.

Cause: Procedures require purchases of hardware necessary for the City's network to be procured through the Information Systems Department. Acquisitions of other computer related components must receive concurrence from Information Systems staff. The Purchasing Division has implemented procedures that provide reasonable assurance that purchase requisitions will be rejected if not properly approved.

Effect: The City will receive the advantage of obtaining licenses under the Agreement with reasonable assurance that the cost of the license will not be included in the cost of hardware.

Recommendations: None.

APPENDIX A - MANAGEMENT RESPONSE



INFORMATION SYSTEMS

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July 13, 2005

Ms. Cheryl Barcala,
City Auditor
City of Scottsdale
7440 E. First Avenue
Scottsdale, AZ 85251

Re: Audit No. 0521 – Software Licensing Appropriation Process

Dear Ms. Barcala:

We are in receipt of report 0521 entitled Software Licensing Appropriation Process and concur with the status of your recommendations.

We wish to thank you and your staff for your efforts on this audit.

Sincerely,

Brad Hartig
Chief Information Officer